

REMARKS

This Amendment is responsive to the Office Action dated November 16, 2005. Applicants have amended claims 1, 5, 7, 26, 32-37, 44, 48, 52, 60 and 62; and canceled claims 4, 6, 29 and 31. Claims 2, 13, 38 and 64 were previously canceled. Claims 1, 3, 4, 5, 7-12, 14-28, 30, 32-37, 39-63 are now pending.

Applicants note that the claim amendments set forth herein have been made for the express purpose of advancing this application to immediate issuance. To this end, Applicants have made extensive amendments to all pending independent claims to very clearly and unequivocally distinguish all of the applied references. However, by virtue of these amendments, Applicants in no way acquiesce to the propriety of the current rejections, and reserve the right to present the previous claims in a continuation application for purposes of an appeal. Applicants note that the current Office Action represents the sixth non-final Office Action in this case, resulting in substantial delay. If any discussion between the Examiner and Applicants' representative might be beneficial to expedite this application in the future, Applicants hereby invite the Examiner to contact Applicants' representative for this purpose.

Drawings

In the Office Action, the Examiner objected to the drawings, noting informalities, such as illegible hand-written elements, smudges, and several other issues. Applicants have already submitted formal drawings, which attended to all of the formalities identified by the Examiner. Furthermore, Applicants have inspected the Public Patent Application Information Retrieval (Public PAIR) system on the USPTO website, and verified that the formal drawings previously submitted by Applicants were, in fact, received by the Patent Office.

In particular, Applicants submitted the formal drawings on November 30, 2000, along with the signed Declaration. According to the Public PAIR system on the USPTO website, these formal drawings were received on December 4, 2000. The drawings are scanned and viewable to the public on the Public PAIR system.

In view of these observations, Applicants believe that the Examiner's objections to the drawings should be withdrawn.

Claim Rejections

In the Office Action, the Examiner rejected claims 1, 3-12, 14-63 under 35 U.S.C. 103(a) as being unpatentable over Hilliard et al. (USPN 6,392,657) (hereafter Hilliard);

rejected claims 1 and 3-12 under 35 U.S.C. 103(a) as being unpatentable over Hilliard in view of Clifton et al. (USPN 6,388,648) (hereafter Clifton); rejected claims 6-12 under 35 U.S.C. 103(a) as being unpatentable over Hilliard in view of Clifton and further in view of Holmes (USPN 6,686,953); and rejected claims 1, 3-12, 14-32, 39-52 and 59-63 under 35 U.S.C. 103(a) as being unpatentable over Hilliard in view of Holmes.

Notwithstanding Applicants' disagreement with the Examiner regarding the patentability of the previous claims, Applicants respectfully thank Examiner Woods for the clarifying analysis in the current Office Action. Applicants now have a better appreciation for the arguments and positions advanced by the Patent Office.

In this Amendment, Applicants have amended all pending independent claims in a manner that should clearly and unequivocally distinguish all of the applied references. Again, however, by virtue of these amendments, Applicants in no way acquiesce to the propriety of the current rejections, and reserve the right to present the previous claims in one or more continuation applications.

All pending claims have been amended to require a color profiling process that includes estimating a black point for the display device based on a black point selection by a user of the display device, estimating a gamma for the display device based on a gamma selection by the user, and estimating the gray balance of the display device based on a gray balance selection by the user. Furthermore, all pending claims have been amended to require that estimating the gray balance comprises displaying a set of gray elements including a gray element identified by the gamma selection and other gray elements that exhibit plus/minus differences in red, green and blue (RGB) relative to the gray element identified by the gamma selection, wherein the gray balance selection by the user is a selection of one of the gray elements in the set of gray elements. Several other clarifying amendments have also been made to various dependent claims.

In view of these amendments, Applicants believe that all claims clearly distinguish the claimed invention from all of the applied references. Specifically, none of the applied references discloses or suggests a gray balance estimation process that includes displaying a set of gray elements including a gray element identified by previous gamma selection along with other gray elements that exhibit plus/minus differences in red, green and blue (RGB) relative to the gray element identified by the gamma selection, wherein the gray balance selection by the user is a selection of one of the gray elements in the set of gray elements. In view of this distinction, allowance of all pending claims is requested.

As acknowledged by the Examiner, Hilliard does not specifically describe a color profiling process that includes gray balance estimation. The Examiner stated, however, that Hilliard specifically mentions grey scale estimation. Based on this, the Examiner stated that Hilliard alone would have suggested a color profiling process that includes gray balance estimation.

Applicants respectively note that the current amendments not only require gray balance estimation (which Applicants maintain is not suggested by Hilliard or the other references, particularly in the context of client devices communicating with a server over a computer network), but also now recite specific details of this grey balance estimation that are lacking from any of the applied references. Specifically, as noted above, all pending claims require a gray balance estimation process that includes displaying a set of gray elements including a gray element identified by previous gamma selection and other gray elements that exhibit plus/minus differences in red, green and blue (RGB) relative to the gray element identified by the gamma selection, wherein the gray balance selection by the user is a selection of one of the gray elements in the set of gray elements.

Notwithstanding this distinction, which as been added to the claims, Applicants' feel obliged to address the Examiner's comments and apparent confusion between the phrase "gray scale correction" used by Hilliard, and "gray balance estimation" used by Applicants. Applicants note that this distinction has already been extensively addressed on the record. See, e.g., Applicant's previous response to the Office Action mailed August 15, 2003.

As explained in Applicants' response to the Office Action mailed August 15, 2003, the reference to "gray scale correction" in Hilliard has no relationship whatsoever to gray balance, as set forth throughout Applicants' claims. Indeed, gray balance is generally meaningless for purposes of gray scale correction. Gray balance, as described in Applicants' disclosure, refers to a balance between different color channels, such as red, green and blue, in a multi-color imaging system. For example, Applicants' disclosure specifically states that gray balance provides an indication of the amount of color shift of a neutral gray toward one or more of the color channels used by the display device, e.g., red, green, and blue. Page 24, lines 29-31. Given this clear definition within Applicants' specification, Applicants also respectively take issue with the Examiner's current comments that Applicants have failed to be a lexicographer with respect to this phrase. Aside from the meaning attributed to the term "gray balance" by Applicant's specification, those skilled in the art are quite familiar with the conventional meaning of this term.

Gray scale correction, in contrast to gray balance, refers to correction of gray scale intensity or density levels that apply to a single color channel, such as a single color channel in a monochromatic system, e.g., for black and white imaging. The Hilliard disclosure makes this point clear. At paragraph 42, for example, Hilliard states that while the disclosure is directed generally to "color correction," it may be applicable to gray scale correction, i.e., monochromatic (non-color) correction. Hence, for gray scale correction for a single color channel, it seems that the concept of gray balance would be irrelevant insofar as there is no need to consider balance between multiple color channels.

In view of this distinction, Applicants respectfully submit, once again, that the Examiner's reliance on discussion of "gray scale correction" in Hilliard, relative to the gray balance limitations of Applicants' claims, is misplaced. Simply put, gray scale correction and gray balance are two entirely different concepts. Again, the concept of gray balance is generally incongruent with consideration of gray scale image data, and is nowhere considered by the Hilliard reference. Gray scale implies intensity or density within only one channel, making the issue of balance with other color channels irrelevant. Accordingly, Hilliard lacks any teaching with respect to any gray balance requirement of Applicants' claims.

In any case, Applicants believe that this definitional distinction between gray scale correction and gray balance estimation should be moot given the fact that the pending claims now specifically recite many other details of this gray balance estimation, all of which are lacking from any of the applied references. Again, all pending claims now require a gray balance estimation process that includes displaying a set of gray elements including a gray element identified by previous gamma selection and other gray elements that exhibit plus/minus differences in red, green and blue (RGB) relative to the gray element identified by the gamma selection, wherein the gray balance selection by the user is a selection of one of the gray elements in the set of gray elements. Not only does this amendment further clarify the definition of gray balance and the distinction of this phrase with respect to gray scale correction, but this amendment also provides specific details of the gray balance estimation process that are lacking from all applied references.

For example, neither Clifton nor Holmes provide any teaching that would remedy the deficiencies of Hilliard, particularly with respect to the amendments set forth in the claims. In particular, neither Clifton nor Holmes discloses or suggests a gray balance estimation process that includes displaying a set of gray elements including a gray element identified by previous gamma selection and other gray elements that exhibit plus/minus differences in red,

green and blue (RGB) relative to the gray element identified by the gamma selection, wherein the gray balance selection by the user is a selection of one of the gray elements in the set of gray elements.

As a final note, Applicants point out that in addition to requiring a specific gray balance estimation process (addressed above), all pending claims also require estimating a black point for the display device based on a black point selection by a user of the display device, estimating a gamma for the display device based on a gamma selection by the user, and estimating the gray balance of the display device based on a gray balance selection by the user. Thus, not only do the claims require estimation of black point, gamma and gray balance, but specifically require a gray balance estimation process that is not in any way suggested in any of the applied references.

While Hilliard may describe the use of image characteristics such as white point, black point, gamma, luminance or other suitable characteristics, it does not specifically use gray balance, whatsoever. Furthermore, gray balance is different than gray scale correction, as outlined above. In any case, these points should be moot insofar as the claims have been amended to further distinguish all applied references and recite specific details of the gray balance estimation techniques used in Applicants' claimed invention.

In view of the claim amendments set forth herein and the arguments above, all claims in this application are in condition for allowance. Applicants respectfully request reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 05-0225. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Respectfully submitted,



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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.